

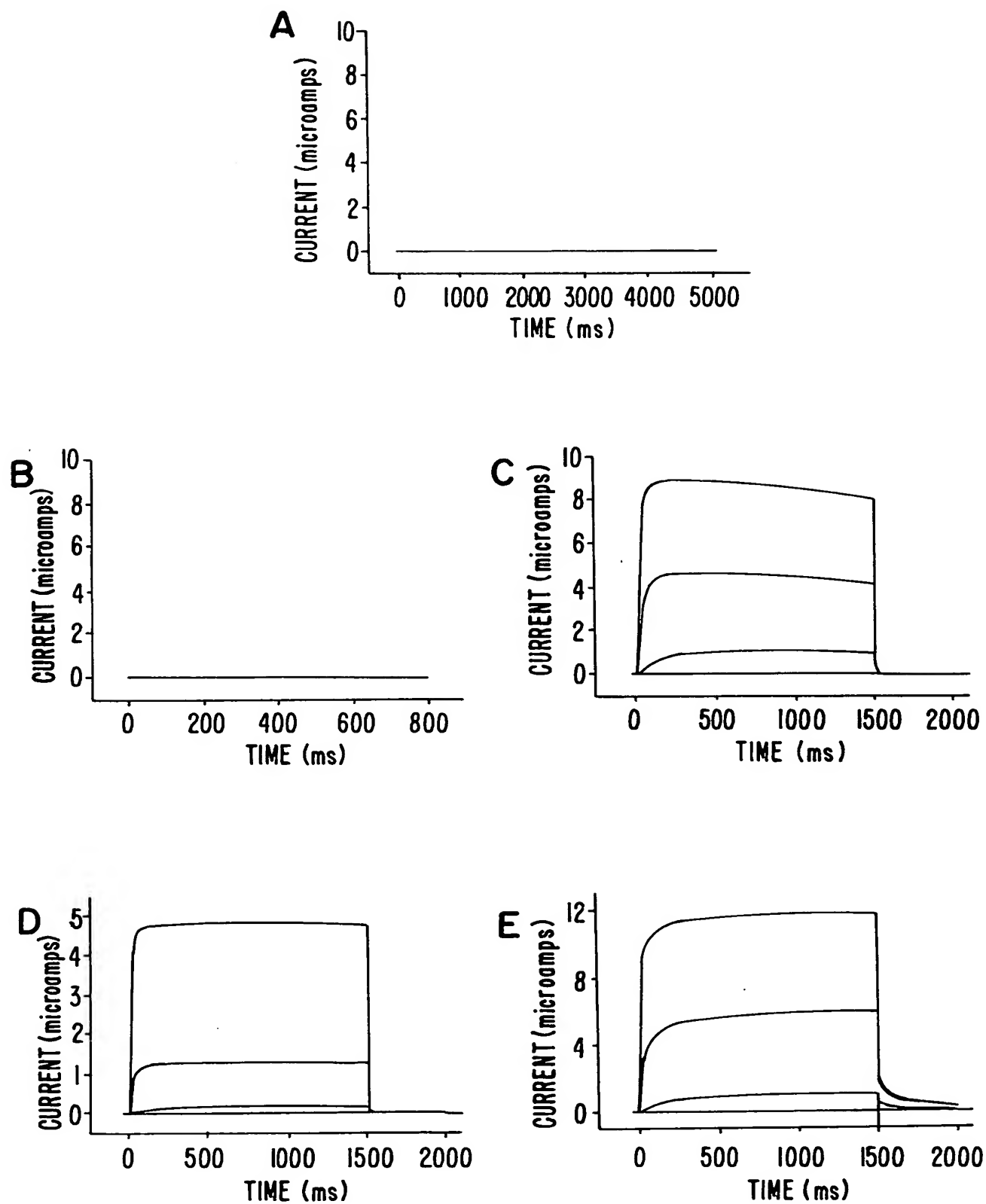
1 MLKQERRRSWYRPWNTTENEGSQHRRSICSLGARSQSQASIHGWTEGNYNYIEEDED kv10.1.1.PRC  
1 MT-----KHGSRSTSSLPP----- hKv2.1.1.PRC  
1 MAE-----KAPPGLNKRTSRSTLSLPP----- hKv2.2.2.PRC  
  
61 GEEEDQWKDDLAEEEDQQAQAGEVTTAKPEGPSDPPALLSTLNVNVGGHSYQLDYCEIAGFFEK kv10.1.1.PRC  
15 -----EFMEIIVRSKACSR-----VRINVGGIAHEVLWRTLDRLPR hKv2.1.1.PRC  
23 -----EVDIIRSKTCSRR-----VKINVGGINHEVLWRTLDRLPR hKv2.2.2.PRC  
  
121 TRLGRLATSTSRQSLCDDYEEQTDYFFDRDPVAFQLVYNFYLSGVTLVLDGICPRR kv10.1.1.PRC  
51 TRLGKLRDCNTHDSLLEVCDDYSIDDDNEYFFDRHPGAFSTILNFYRTGRLLHMMEEMCALIS hKv2.1.1.PRC  
59 TRLGKLRDCNTHESLLEVCDDYNLNENEYFFDRHPGAFSTILNFYRTGKLLHMMEEMCALIS hKv2.2.2.PRC  
  
181 FLPEIGWGVRLKVTPRCCRICFEERRDELSERLKIQLHQLRAQAQVEEAEEELFRDMRFYG kv10.1.1.PRC  
111 FSQELDYWGIDEIYLESCCQARYHQKQONNEELKREAETLPEREGEE-----R-DNTCCA hKv2.1.1.PRC  
119 FGQELDYWGIDEIYLESCCQARYHQKQONNEELRREAETMRDGECEE-----F-DNTCCP hKv2.2.2.PRC  
  
241 PQRRRLWNLMEKFFSSVAAKAIGVASSTFVLVSVVALALNTVEEMQHSQGQGEFFPDLR kv10.1.1.PRC  
166 EKRRKKLWDLLEKPNSSVAAKILATISIMFIVLSTIALSLNTLPELQSLDEFGQSTDN--E hKv2.1.1.PRC  
174 DKRKKLWDLLEKPNSSVAAKILAIIVSILFIVLSTIALSLNTLPELQETDEFGQLNDN--R hKv2.2.2.PRC  
  
301 IDEHVEMLCMGFTILEYLLRLASSTFDLRRFFARSALNLVDLVAIPLPLQLLIECFTGEGH kv10.1.1.PRC  
224 QLAHVEAVCIAWFTMEYLLRFLSSPKWKFFKGPLNAIDLLAILPYVVTIFLT----- hKv2.1.1.PRC  
232 QLAHVEAVCIAWFTMEYLLRFLSSFNKWKFFKGPLNVLDLLAILPYVVTIFLT----- hKv2.2.2.PRC  
  
361 QRGQTVGSVGVGVQLRVMLMRIFRILKLARHSTGLRAEGFTLRQCYQQVGGQLLFLFAM kv10.1.1.PRC  
277 ESNKSVLQFNVRVQIFRIMRILRILKLARHSTGLQSLGFTLRRSYNELGLLILFLAM hKv2.1.1.PRC  
285 ESNKSVLQFNVRVQIFRIMRILRILKLARHSTGLQSLGFTLRRSYNELGLLILFLAM hKv2.2.2.PRC

FIG. 1A

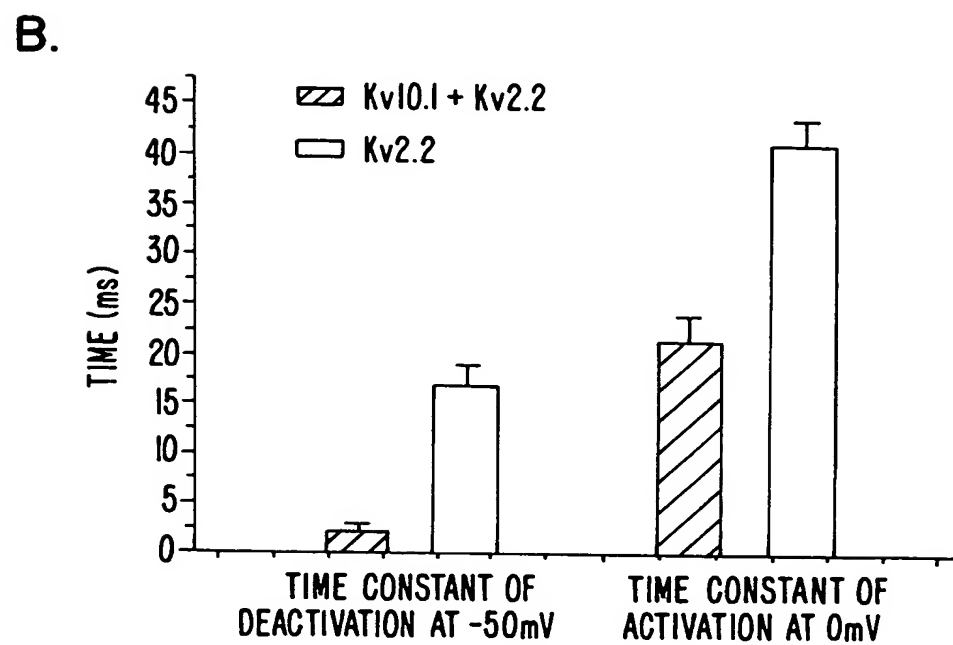
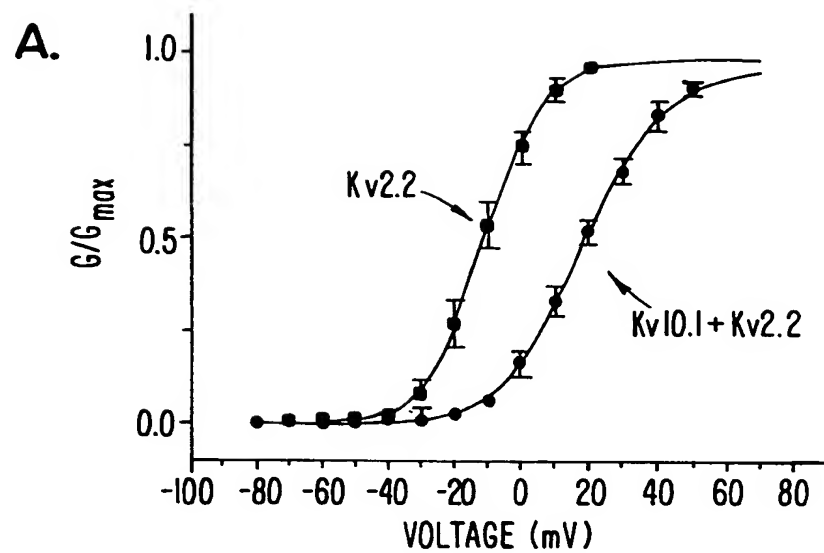
421 G I F T F S A A V Y S V E H D V P S I N F T I I P H S W W A A V S I S T V G Y G D M Y P E T H L G R F F A F L C L A F kv10.1.PRC  
 337 G I M I F S S L V F F A E K D E D D T K F K S I P A S F W W A T I T M T T V G Y G D I Y P K T L L G K I V G G L C C I A hKv2.1.PRC  
 345 G I M I F S S L V F F A E K D E D A T K F K S I P A S F W W A T I T M T T V G Y G D I Y P K T L L G K I V G G L C C I A hKv2.2.PRC  
  
 481 G I I L N G M P I S I L Y N K F S D Y S K I K A Y E Y T T I R R E I - - - - - R G E V N F H Q - - R A R K K I A E C kv10.1.PRC  
 397 G V L V I A L P I P I I V N N F S E F Y K E Q K R Q E K A I K R R E A L E R A K R N G S I V S H N M K D A F A R S I E M hKv2.1.PRC  
 405 G V L V I A L P I P I I V N N F S E F Y K E Q K R Q E K A I K R R E A L E R A K R N G S I V S H N L K D A F A R S M E L hKv2.2.PRC  
  
 532 L L - - - - - G S N P Q L T P R - Q E N kv10.1.PRC  
 457 M D I V E K N G E N M G K K D K V Q D N H L S P N K W K T K R T L S E T S S S K S F E T K E Q G S P E K A R S - - - hKv2.1.PRC  
 465 I D V A V E K A G E S A N T K D S A D D N H L S F S R W K W A R K A L S E T S S N K S F E N K Y Q E V S Q K D S H E Q L hKv2.2.PRC  
  
 546 - - - - - S S S P Q H L N V Q L E D M Y N K M A K T Q - - S Q F I L N T K E S A A Q S K P - K E E I E M E S I P S P V A kv10.1.PRC  
 514 - - - - - S S S P Q H L S A Q K L E M I Y N E I T K T Q P H S H P N P D C Q E K P E R P S A Y E E E I E M E E V V C P Q E hKv2.1.PRC  
 525 N N T F S S P Q H L S A Q K L E M I Y N E I T K T Q P H S H P N P D C Q E K P E R P S A Y E E E I E M E E V V C P Q E hKv2.2.PRC  
  
 546 P I P - T R F E G V I D M R S M S S I D S F I S C A T D F P E A T R F S H S P L T S L P S K T G G S T A P E V G W R G A kv10.1.PRC  
 567 Q I A V A Q E T E V I V D M K S T S S I D S F I S C A T D F T E T E R - - - - - S P L P P P S A S H L Q M - - - - - hKv2.1.PRC  
 585 - - - - - K E P T D L P G T E E H Q R A R - - - - - G P E F L T S R E K G P A A R D G T L E Y A P V D I T V N L D A S G hKv2.2.PRC  
  
 546 L G A S G R F V E A N P S P D A S Q H S S F F I E S P K S S M K T N N P L K L R A L K V N F M E G D P S P L P V L G kv10.1.PRC  
 626 - - - - - K E P T D L P G T E E H Q R A R - - - - - G P E F L T S R E K G P A A R D G T L E Y A P V D I T V N L D A S G hKv2.1.PRC  
 632 - - - - - K E P T D L P G T E E H Q R A R - - - - - G P E F L T S R E K G P A A R D G T L E Y A P V D I T V N L D A S G hKv2.2.PRC  
  
 546 M - - - - - Y H D P I R N R G S A A A V A G L E C A T L L D K A V L S P E S S I Y T T A S A K T P P R S P E K H T A I A F kv10.1.PRC  
 686 S Q C G L H S P I Q S D N A T D S P K S S L K G S N P L K S R S L K V N F K E N R G S A P Q T P P S T A R P L P V T T A hKv2.1.PRC  
 683 - - - - - K E P T D L P G T E E H Q R A R - - - - - G P E F L T S R E K G P A A R D G T L E Y A P V D I T V N L D A S G hKv2.2.PRC

FIG. 1B





**FIG. 3.**



**FIG. 4.**

TR = TRACE LEVELS

|             |                    |
|-------------|--------------------|
| TR          | WHOLE BRAIN        |
|             | FETAL BRAIN        |
|             | TRIGEMINAL         |
|             | DRG                |
| TR          | FRONTAL CORTEX     |
|             | HIPPOCAMPUS        |
|             | + SPINAL CORD      |
|             | + SUBSTANTIA NIGRA |
|             | HYPOTHALAMUS       |
| KV10.1 mRNA | CEREBELLUM         |
|             | KIDNEY             |
|             | HEART              |
|             | + TESTIS           |
|             | SPLEEN             |
|             | PANCREAS           |
|             | BLADDER            |
|             | + PROSTATE         |
|             | LIVER              |
|             | SKELETAL MUSCLE    |
|             | PLACENTA           |
|             | COLON              |
|             | + RETINA           |

FIG. 5.